

**CALIFORNIA DIVISION OF MINES AND GEOLOGY  
FAULT EVALUATION REPORT FER-216  
SUPPLEMENT No.1**

**ROSE CANYON FAULT ZONE  
San Diego County, California**

by  
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August 30, 1991

**INTRODUCTION**

This is a supplement to FER-216, dated July 10, 1990 and revised January 25, 1991. This supplement is to document a change to the faults shown on Figure 5a of the referenced report. Furthermore, a minor change is recommended to the Official Special Studies Zones Map for the La Jolla quadrangle, to be issued on November 1, 1991. The recommended change will not affect the zone boundaries as proposed on the Preliminary Review Map (DMG, 1991).

**SUMMARY OF NEW DATA**

Several linear features were observed, in aerial photographs, in the vicinity of San Diego Gas and Electric Company's Rose Canyon facility. The most prominent feature has been trenched and it has been confirmed that it is a fault scarp. Additionally, evidence was found to indicate a minimum of 8.7 m of right-lateral displacement (Scott Lindvall, personal communication, August, 1991). A possible minor parallel trace had also been interpreted based on review of enlargements of aerial photographs from 1941. I have since had an opportunity to look at enlargements of the 1941 photos made from the original negatives (rather than from prints). These photos have much better resolution and it was possible to see that the feature interpreted to be a minor fault (see Figure 6, with this supplement) was probably an artifact of plowing. Minor local drainages or rills from winter rains may have been deflected by this apparent ridge of plowed soil or debris. Similar features, with concentric plow marks, are visible in several other nearby fields. None of the other plowing artifacts had been interpreted as faulting.

**DISCUSSION AND CONCLUSIONS**

The minor fault, indicated by three short dashes on Figure 5a of the original Fault Evaluation Report and further indicated on Figure 6 in this supplement, is now considered to be most likely an artifact of plowing. Similar features are apparent elsewhere. This reinterpretation of a minor feature in no way affects the mapping of the now well-documented main fault immediately to the west. The proposed Special Studies Zone boundaries shown on the Preliminary Review Map (DMG, 1991) were based on distance from the main trace and should not be affected by this change.

### RECOMMENDATIONS

I recommend that the short dashed lines representing this feature, as indicated on Figure 6, be removed from the Official Special Studies Zones Map for the La Jolla quadrangle. I recommend no changes to the zone boundaries as proposed on the Preliminary Review Map (DMG, 1991).

*Reviewed/  
approved -  
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9/30/91*

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### **AERIAL PHOTOGRAPHS USED**

Fairchild Aerial Surveys - enlargements (to 1:4800) from flight 6850, frames 93 and 94, flown 1-3-41.

### **REFERENCES**

DMG, 1991, Preliminary review map, Special Studies Zones, La Jolla quadrangle: State of California, Department of Conservation, Division of Mines and Geology, 1:24,000, May 1, 1991.